

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P882978

Luminaire Tested: **NAV-SB3A-835-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8904 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

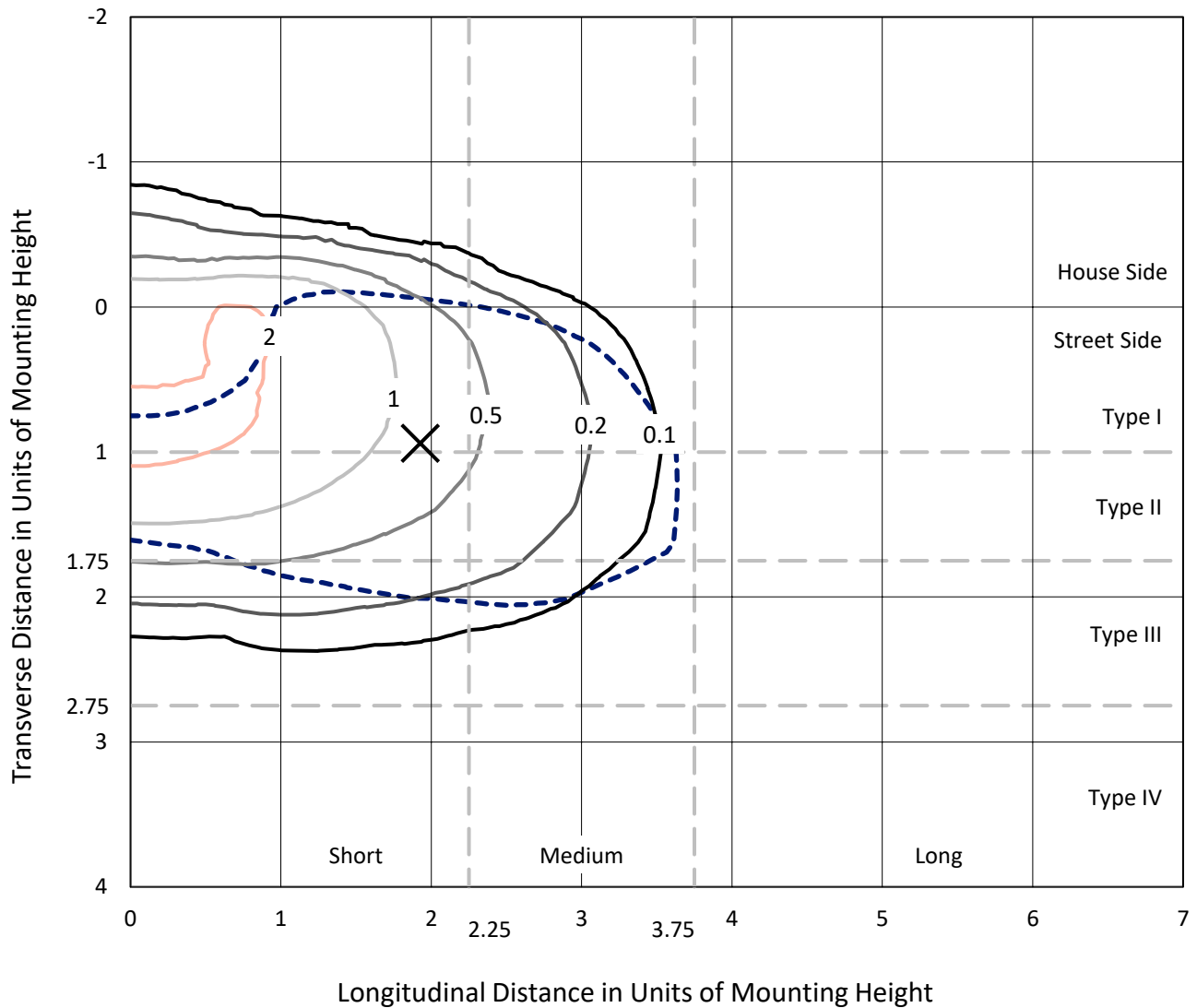
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

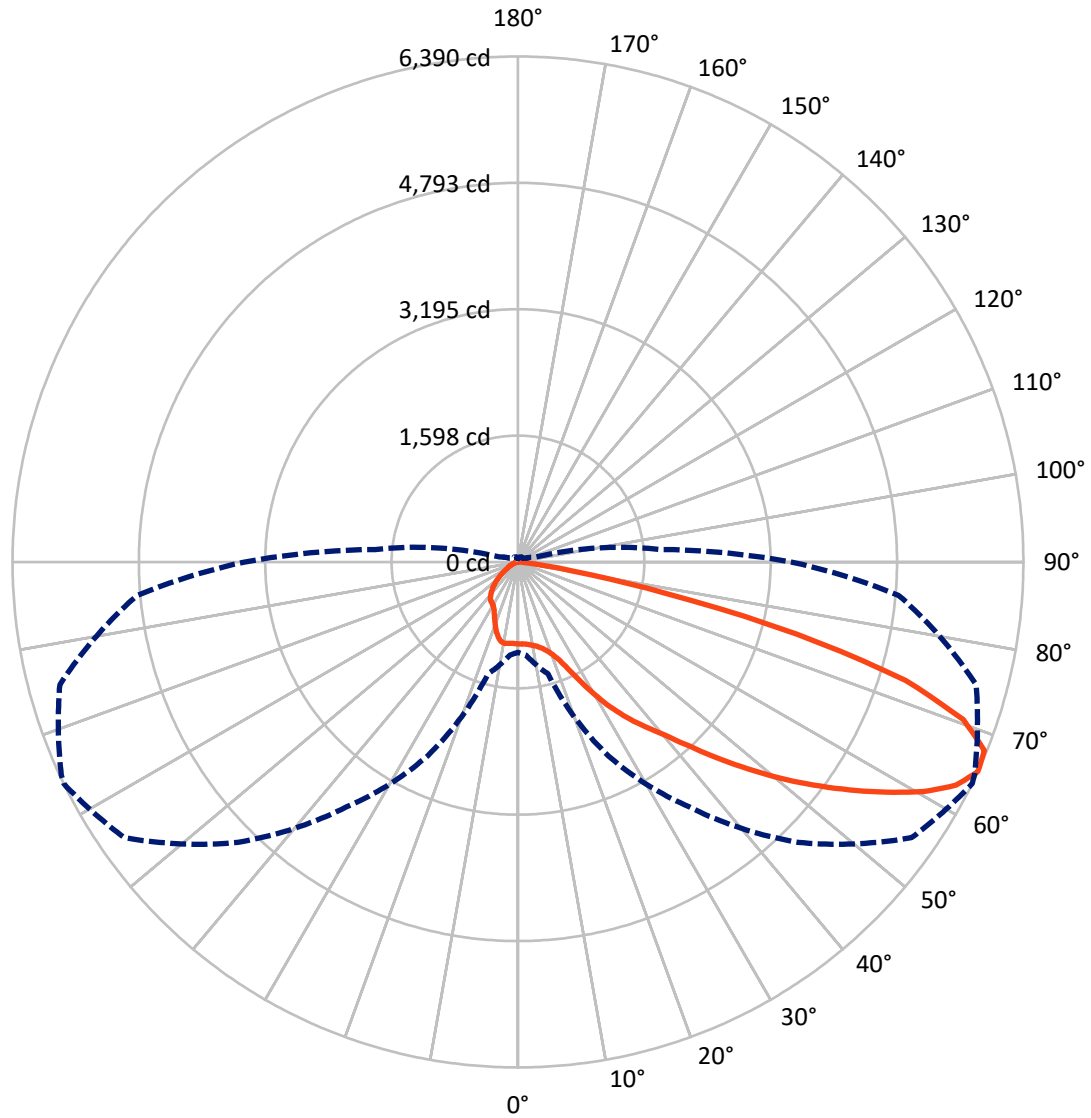
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1190.7	0.0	1190.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7713.3	0.0	7713.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	8904.0	0.0	8904.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	1.1
10°-20°	259.2	2.9
20°-30°	491.1	5.5
30°-40°	993.7	11.2
40°-50°	1692.8	19.0
50°-60°	2302.0	25.9
60°-70°	2161.7	24.3
70°-80°	866.1	9.7
80°-90°	42.0	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8904.0	100.0
0°-180°	8904.0	100.0

Coefficient of Utilization



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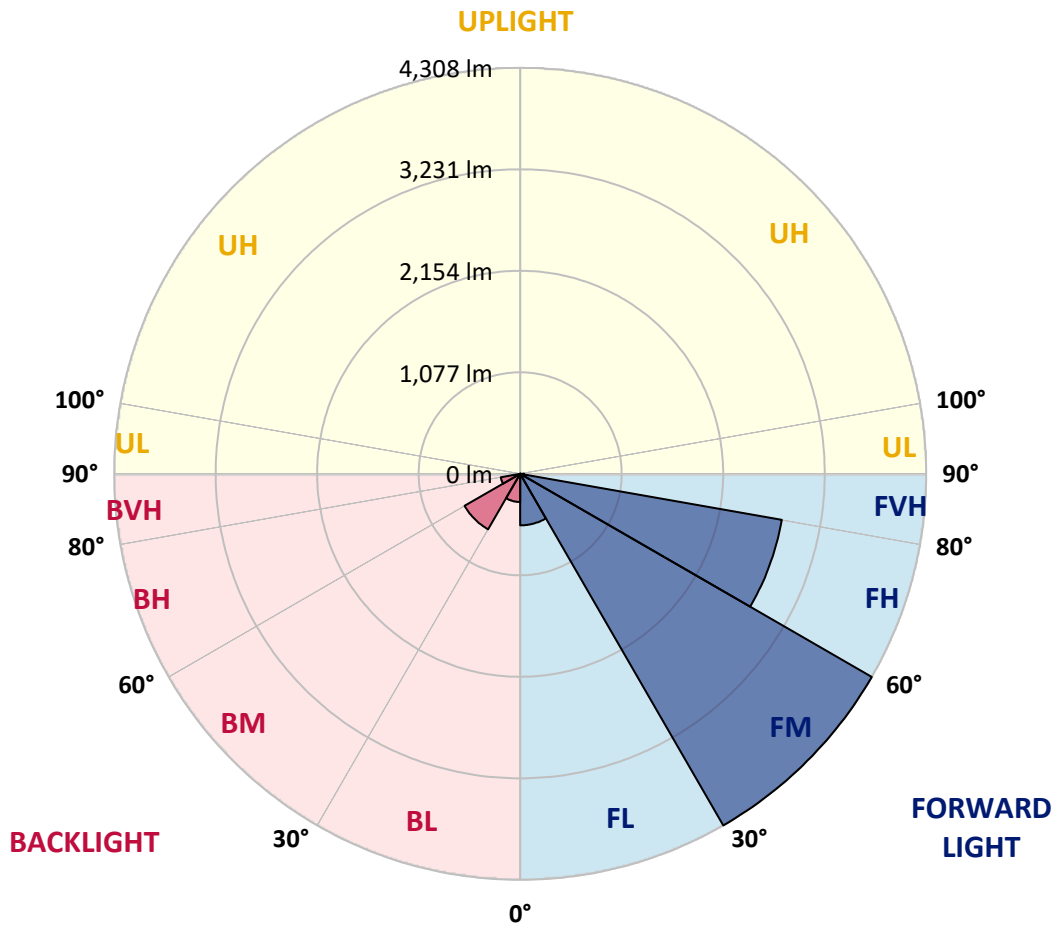
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	546.8	6.1			
FM (30°-60°)	4307.7	48.4			
FH (60°-80°)	2818.8	31.7			G2/5000
FVH (80°-90°)	39.9	0.4			G1/100
BL (0°-30°)	299.0	3.4	B1/500		
BM (30°-60°)	680.7	7.6	B1/1000		
BH (60°-80°)	209.0	2.3	B1/500		G1/500
BVH (80°-90°)	2.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6
2.5°	1032.0	1039.2	1037.4	1035.6	1035.0	1036.2	1036.8	1036.2	1036.2	1036.2	1036.8
5°	1012.3	1018.3	1018.3	1022.5	1028.5	1035.6	1041.0	1042.2	1043.4	1045.2	1044.6
7.5°	974.7	979.5	983.1	996.8	1011.8	1030.9	1047.0	1055.3	1056.5	1063.1	1065.5
10°	949.1	955.0	961.0	975.3	996.8	1025.5	1052.9	1073.2	1076.2	1091.7	1098.9
12.5°	947.9	953.9	961.6	977.1	1002.2	1032.6	1066.1	1095.3	1100.7	1123.4	1138.3
15°	960.4	967.6	974.7	993.8	1020.7	1057.7	1093.5	1129.9	1135.3	1167.5	1183.7
17.5°	986.1	995.6	1001.0	1020.1	1048.8	1089.9	1137.1	1178.9	1183.7	1221.3	1241.6
20°	1036.8	1048.2	1050.0	1065.5	1093.5	1137.7	1193.8	1245.7	1251.7	1294.7	1317.4
22.5°	1141.9	1158.0	1143.7	1151.4	1176.5	1220.7	1281.6	1347.2	1355.6	1404.5	1424.8
25°	1326.9	1349.6	1312.6	1299.5	1310.2	1356.2	1432.6	1515.5	1525.1	1564.5	1574.6
27.5°	1690.4	1661.2	1605.1	1550.2	1517.9	1544.2	1630.1	1732.8	1744.7	1783.0	1771.0
30°	2089.8	2064.1	1988.3	1866.5	1790.1	1785.9	1865.3	1979.9	1993.7	2030.1	1993.7
32.5°	2489.7	2465.2	2382.8	2233.0	2100.5	2034.8	2089.8	2216.9	2224.1	2247.3	2193.6
35°	2883.0	2858.0	2775.6	2622.2	2459.2	2310.0	2299.3	2442.5	2444.9	2469.4	2389.4
37.5°	3278.8	3257.9	3170.2	3019.7	2859.2	2653.2	2553.6	2656.2	2659.2	2683.1	2600.1
40°	3561.1	3570.1	3509.8	3393.4	3255.5	3030.5	2838.9	2883.6	2865.7	2905.7	2856.2
42.5°	3803.5	3821.4	3768.8	3710.4	3630.4	3432.2	3192.2	3184.5	3155.8	3177.3	3126.0
45°	4013.0	4027.9	3980.7	3967.0	3965.2	3826.2	3578.4	3531.9	3491.9	3487.7	3426.2
47.5°	4090.0	4118.6	4138.9	4184.9	4274.4	4215.9	3977.8	3905.5	3860.8	3827.9	3730.6
50°	4119.2	4149.7	4218.9	4352.6	4564.5	4589.6	4375.3	4294.1	4239.2	4179.5	4036.3
52.5°	4079.8	4134.2	4227.3	4452.3	4759.7	4889.2	4756.7	4685.7	4623.0	4525.7	4313.2
55°	3847.6	3902.0	4092.4	4451.1	4857.0	5099.3	5117.3	5085.6	5015.2	4861.8	4537.1
57.5°	3358.2	3438.8	3740.2	4299.5	4855.2	5280.2	5470.6	5493.3	5414.5	5194.9	4713.2
60°	2680.1	2789.3	3157.0	3963.4	4705.4	5378.1	5780.4	5893.8	5810.3	5523.1	4855.8
62.5°	1870.1	1996.6	2344.6	3437.0	4362.8	5307.7	6006.6	6216.2	6152.9	5816.8	4910.7
65°	1140.7	1181.3	1461.8	2704.6	3780.2	5012.8	6076.5	6390.4	6369.6	5996.5	4829.5
67.5°	759.9	793.9	874.5	1854.6	2934.4	4423.7	5909.3	6360.0	6366.0	5967.2	4532.3
70°	457.8	487.1	539.6	1078.6	1901.7	3501.4	5391.8	5972.0	6006.6	5576.3	3968.8
72.5°	188.6	208.3	256.1	488.9	984.9	2222.3	4293.5	5127.4	5208.0	4688.7	3046.0
75°	106.8	117.0	150.4	245.3	427.4	1035.6	2600.7	3639.9	3758.7	3231.6	1832.5
77.5°	71.0	75.8	97.3	158.8	240.6	353.4	1111.4	1896.4	2123.2	1765.0	793.3
80°	47.8	51.9	66.9	106.2	156.4	151.6	354.0	702.6	864.3	606.5	193.4
82.5°	32.2	32.8	47.8	69.8	99.1	73.4	104.5	218.5	274.6	175.5	73.4
85°	18.5	17.9	35.2	40.6	44.2	30.4	31.6	65.7	86.0	74.0	41.8
87.5°	2.4	3.6	13.7	10.7	6.0	6.6	6.6	11.3	16.7	17.9	9.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6	1035.6
2.5°	1036.8	1036.2	1034.4	1032.6	1028.5	1026.1	1027.3	1026.1	1025.5	1026.1	1028.5
5°	1044.6	1042.8	1038.0	1032.0	1023.7	1013.5	1007.0	997.4	988.5	983.1	984.3
7.5°	1065.5	1063.7	1057.1	1040.4	1013.5	971.2	932.4	898.3	872.7	857.8	858.3
10°	1098.9	1095.9	1085.8	1048.8	978.3	885.8	808.8	744.9	703.2	683.5	681.7
12.5°	1138.3	1134.7	1116.8	1041.0	911.5	767.0	660.8	589.7	550.9	533.6	531.8
15°	1184.9	1180.1	1144.9	1004.0	814.2	635.7	538.4	485.3	460.2	444.7	445.3
17.5°	1242.8	1234.4	1165.8	948.5	708.5	535.4	463.2	423.2	401.1	386.2	385.0
20°	1318.0	1304.2	1182.5	882.2	611.2	472.2	412.5	379.0	362.3	349.2	346.8
22.5°	1423.0	1403.3	1202.8	810.6	542.6	428.6	374.9	350.4	336.7	321.7	319.3
25°	1553.1	1529.9	1227.8	744.3	495.4	391.0	347.4	327.1	311.0	293.7	291.9
27.5°	1735.2	1693.4	1257.7	690.0	454.8	358.7	322.3	299.6	281.1	266.8	263.8
30°	1938.1	1869.5	1283.9	657.2	417.8	328.9	289.5	266.8	249.5	239.4	237.6
32.5°	2130.3	2037.2	1301.2	642.9	384.4	294.9	253.7	229.2	216.1	213.1	214.9
35°	2311.8	2188.8	1299.5	629.1	354.6	260.8	218.5	193.4	183.2	185.0	185.0
37.5°	2520.7	2350.6	1286.9	607.6	330.1	229.8	188.0	165.9	157.0	157.6	160.0
40°	2763.7	2537.4	1279.2	567.1	303.2	201.2	163.0	145.0	138.5	136.1	135.5
42.5°	3022.7	2718.3	1280.4	521.1	269.8	175.5	145.6	130.7	124.8	123.0	122.4
45°	3283.0	2890.8	1282.1	473.3	234.6	155.8	133.1	120.6	117.0	114.6	114.6
47.5°	3527.7	3037.6	1248.7	422.0	200.0	140.9	123.0	114.6	111.6	108.6	108.6
50°	3755.7	3135.5	1168.1	362.3	172.5	128.9	115.2	109.2	106.2	103.3	103.3
52.5°	3933.0	3151.1	1035.0	300.8	153.4	120.0	110.4	105.1	101.5	98.5	97.9
55°	4011.8	3053.8	845.8	243.5	138.5	112.2	105.7	100.3	96.1	93.1	92.5
57.5°	3991.5	2849.0	659.6	195.8	124.2	104.5	99.7	96.1	91.3	86.6	86.0
60°	3891.8	2575.0	497.2	163.0	111.0	96.1	93.1	90.1	83.6	76.4	75.2
62.5°	3719.3	2230.6	354.6	134.9	96.7	86.6	85.4	83.0	73.4	60.3	59.1
65°	3455.5	1812.2	238.8	112.2	83.0	75.8	76.4	72.2	59.7	44.8	43.6
67.5°	3069.9	1325.1	152.8	91.9	69.2	63.3	63.9	61.5	50.7	38.2	36.4
70°	2578.6	877.4	99.7	69.8	55.5	48.9	52.5	53.1	43.0	31.0	29.8
72.5°	1890.4	518.1	69.8	51.9	40.6	34.0	43.0	44.2	34.6	23.3	22.1
75°	1077.4	245.9	52.5	37.6	25.1	23.9	33.4	33.4	23.9	15.5	14.3
77.5°	452.5	102.7	37.0	24.5	14.3	13.7	22.7	20.9	11.9	7.2	7.2
80°	130.7	46.0	19.7	11.9	6.0	5.4	9.0	6.6	3.0	1.2	1.2
82.5°	51.3	20.3	7.8	4.8	2.4	2.4	1.2	0.0	0.0	0.0	0.0
85°	30.4	8.4	3.6	1.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.8	1.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)